

<sup>a</sup> Ilaria De Sanctis <sup>a</sup> Filippo E. Ciarapica <sup>b</sup> Joaquín Ordieres

<sup>a</sup> Università Politecnica delle Marche, DIISM (i.desanctis@univpm.it)

<sup>b</sup> Universidad Politécnica de Madrid- E.T.S. DE INGENIEROS INDUSTRIALES.

INGENIERÍA DE ORGANIZACIÓN, ADMINISTRACIÓN DE EMPRESAS Y ESTADÍSTICA

## Abstract

In the last few years, at European Union level, companies are facing many obstacles due to macroeconomic instability. In order to stay competitive and survive in the present world turmoil, companies must seek to new ways of reducing costs, increase the quality of the products and meet the ongoing changes in the market. Driven by the success performed by Toyota and several other organizations worldwide, a growing number of firms have been adopting Lean manufacturing practices to fulfill market needs, reduce costs, and gain competitive advantages over competitors.

But, although many firms report large benefits from Lean implementation, Lean is not a panacea. Through an overview of Lean strategy implementation in Italian manufacturing industries, and a classification in “low”/“medium” and “high lean performers” we are able to see whether lean thinking could be a way for improving operational performance.

Moreover, combining field interviews with the literature review, theoretical connections have been developed among Lean manufacturing techniques, operational responsiveness and firm growth performances. A conceptual model has been proposed and represented in the left side of Figure 1. The aim is investigating the network of influences among lean best practices (supplier practices, workforce practices, production efficiency practices and quality practices), operational responsiveness (Product mix variety, Product innovation and Time effectiveness) and firm growth performances. Final model is reported on the right side of Figure 1.

Finally, the organizations are usually reluctant to admit that the Lean implementation has failed, not to mention giving an exact reason for the failure. Hence, Lean implementation failures and obstacles have been collected. Through a structured survey, a model investigating the link between Enterprise information and the main difficulties in Lean implementation has been developed and detailed in Figure 2.

The survey is available to the following link:

<https://www.p2ml.org/encuestas/index.php/survey/index/sid/248749/token/ENG/lang/en/newtest/Y>

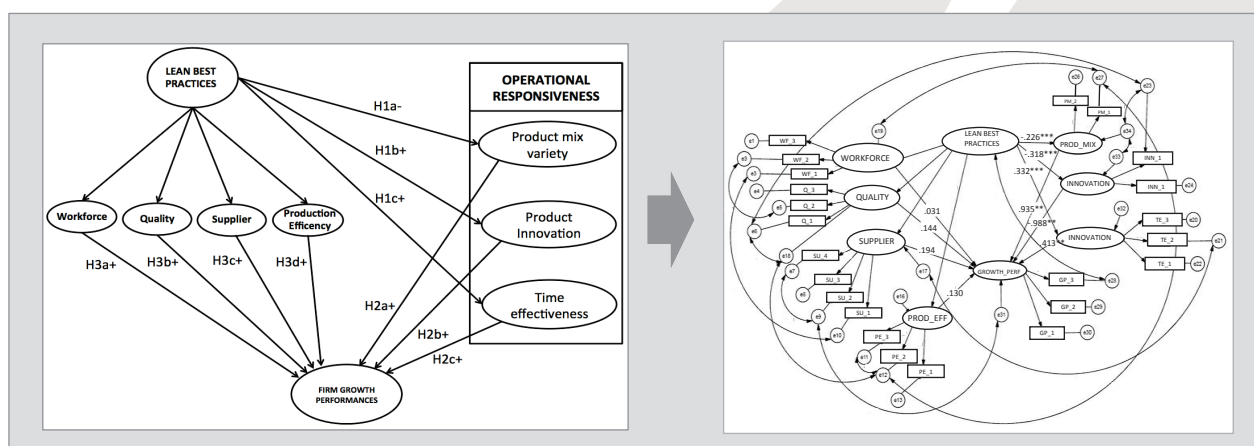


Figure 1. Conceptual model and final results.

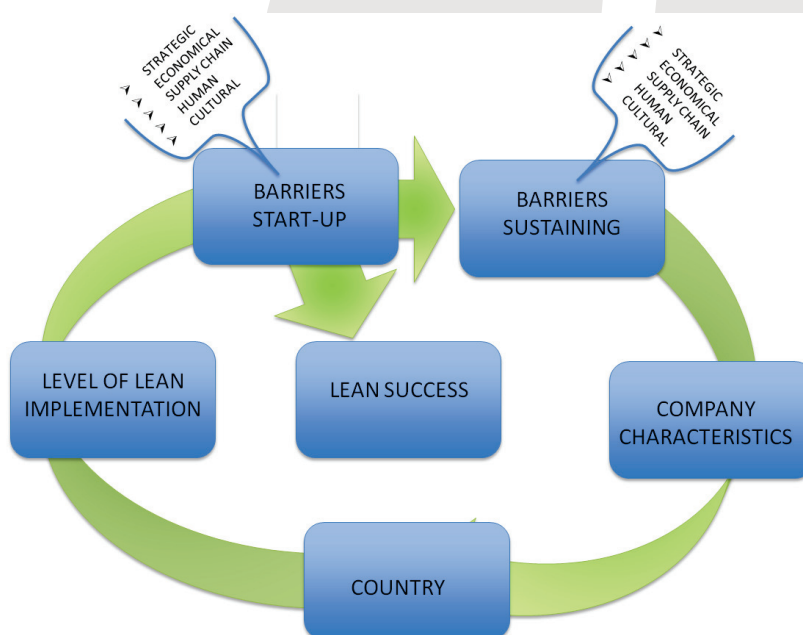


Figure 2. Model investigating the link between Enterprise information and the main difficulties in Lean implementation.